Applicant: David Farrar, et al. Attorney's Docket No.: 00167-482001 / 02-31-0454

Serial No.: 10/645,962 Filed: August 22, 2003

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Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims:

1. (Currently Amended) A device for tissue repair or replacement, comprising first and second components having different relative rates of in vivo degradation, the first component comprising a preformed ceramic scaffold structure and the second component comprising a polymer, and the first component having a higher rate of in vivo degradation than the second component, the first and second components being arranged relative to each other so that, after implantation of the device, the first component degrades in vivo leaving a scaffold formed of the second component, the scaffold having pores into which tissue can infiltrate wherein the device, when initially implanted, does not have sufficient porosity to support tissue ingrowth.

2-7. (Cancelled)

- (Original) The device of claim 1 wherein the device is substantially non-porous prior to implantation into a patient.
- 9. (Original) The device of claim 1 wherein there is at least an 8 week difference between the degradation rates of the components.
- 10. (Original) The device of claim 9 wherein the degradation rates differ by about 12 months to 2 years.

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(Original) The device of claim 1 wherein at least one of the components includes a
therapeutic additive.

12-36. (Cancelled)

37. (Currently Amended) A method of tissue repair or replacement, comprising implanting in a patient a device including comprising first and second components having different relative rates of in vivo degradation, the first component comprising a preformed ceramic scaffold structure and the second component comprising a polymer, and the first component having a higher rate of in vivo degradation than the second component, the first and second components being arranged relative to each other so that, after implantation of the device, the first component degrades in vivo leaving a scaffold formed of the second component, the scaffold having pores into which tissue can infiltrate, wherein the device, when initially implanted, does not have sufficient porosity to support tissue ingrowth.

38-48. (Cancelled)

- 49. (New) A device for tissue repair or replacement, comprising first and second components having different relative rates of *in vivo* degradation, the first component comprising a ceramic and the second component comprising a polymer, and the first component having a higher rate of *in vivo* degradation than the second component, the first and second components being arranged relative to each other so that, after implantation of the device, the first component degrades *in vivo* leaving a scaffold formed of the second component, the scaffold having pores into which tissue can infiltrate, wherein the device, prior to implantation, is in the form of a solid preformed structure, and does not have sufficient porosity to support tissue ingrowth.
- 50. (New) A device for tissue repair or replacement, comprising first and second components having different relative rates of in vivo degradation, the first component comprising

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a ceramic and the second component comprising a resorbable polymer, the first component having a higher rate of *in vivo* degradation than the second component, the first and second components being arranged relative to each other so that, after implantation of the device, the first component degrades *in vivo* leaving a scaffold formed of the second component, the scaffold having pores into which tissue can infiltrate, wherein the device, when initially implanted, does not have sufficient porosity to support tissue ingrowth.

- 51. (New) The device of claim 1 wherein the device, when initially implanted, is in the form of a solid preformed structure.
- (New) The device of claim 1 wherein the polymer fills interconnecting pores of the ceramic scaffold.
 - 53. (New) The device of claim 51 wherein the polymer is resorbable.